

MEDICAL DEVICE BALLOONS CONTAINING  
THERMOPLASTIC ELASTOMERSABSTRACT

5 A dilatation balloon and catheter for insertion into a  
bodily conduit. The catheter (10) includes shaft (12) and a  
dilatation balloon (24) at the distal end of the shaft. The  
balloon is inflated via a central lumen (14) in the shaft  
for delivery of a fluid inflation media. The balloon is  
10 fabricated from a combination of a thermoplastic elastomer  
(TPE), preferably an engineering thermoplastic elastomer  
(ETE), with a non-compliant structural polymeric material.  
The combination may be a blend of the non-compliant  
structural polymer and the TPE. Alternatively, the  
15 combination may be a layered balloon having, for example, a  
non-compliant structural polymer inner layer and a soft,  
abrasion resistant, elastomeric outer layer. Methods for  
fabricating the balloon from the combination of a TPE and a  
non-compliant structural polymer are also disclosed.